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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/922,688	08/07/2001	Bily Wang	Harvatek-9030	8720

7590 01/15/2003
Hung Chang Lin
8 Schindler Court
Silver Spring, MD 20903

EXAMINER

FARAHANI, DANA

ART UNIT PAPER NUMBER

2814

DATE MAILED: 01/15/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/922,688

Applicant(s)

WANG ET AL.

Examiner

Dana Farahani

Art Unit

2814

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 29 October 2002.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 7-12 and 14-19 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 7-12 and 14-19 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which the subject matter pertains. Patentability shall not be negated by the manner in which the invention was made

2. Claims 7, 14, and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sasano (U.S. Patent 6,313,525) in view of Komoto et al., hereinafter Komoto (U.S. Patent 6,340,824), both previously cited.

Sasano discloses in figure 4 a method for fabricating a focusing cup for an optoelectronic device package comprising the steps of forming a through hole in an upper insulating substrate layer b; stacking the upper insulating substrate over a lower insulating substrate a; and mounting an optoelectronic device f on the lower substrate inside the through hole.

Sasano does not disclose a metallic plate between the optoelectronic device and the lower substrate to enhance light reflection.

Komoto discloses in figure 122 a total metal reflector RE3 made in a light-emitting hole that extends beyond the bottom of the cup it is inserted in, in order to limit the path for releasing light (see column 56, lines 15-20). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to use a metal plate, or plurality of metal plates, between device 7 of figure 1 in Sasano's invention in order to limit the path of releasing light.

3. Claims 9-11, 15, 16 and 18-19 are rejected under 35 U.S.C. 102(e) as being unpatentable over Sasano.

Regarding claim 19, Sasano discloses in figure 4 a method for fabricating a focusing cup for an optoelectronic device package comprising the steps of forming a through hole in an upper insulating substrate layer b; stacking the upper insulating substrate over a lower insulating substrate a; and mounting an optoelectronic device f on the lower substrate inside the through hole.

Sasano does not disclose, in figure 4, the hole is of conical shape.

Sasano discloses in figure 1, image device 7 is in a conical shaped hole in substrate 1. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to make the hole of figure 4 conical shape in order to conveniently mount the wires of the image device on a step shaped wall of the cone, as shown in figure 1.

Regarding claim 18, the optoelectronic device of figure 1 has two top electrodes (not shown in the figure) wire-bonded by wiring 8 respectively to two bonding pads, which are on the part numbered 4, mounted on top of the upper substrate.

Regarding claims 9-11, 15 and 16, the wall of the through hole is covered with metal coating 6 to enhance light reflection.

4. Claims 8 and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sasano as applied to claim 8 above, and further in view of Kamizato et al., hereinafter Kamizato, previously cited (U.S. 5,642,373).

Sasano discloses the limitation in claim 8, as discussed above. Sasano does not disclose the lead ends are folded.

Kamizato discloses in column 5, lines 56-67, that folding the light generated region gives more power optical output. Therefore, It would have been obvious to one of ordinary skill in the art at the time the invention was made to fold the electrodes in order to receive more power output.

Response to Arguments

5. Applicant's arguments filed 10/29/02 have been fully considered but they are not persuasive.

Applicant primarily argues that none of the references disclose a metal plate extending beyond the bottom of the cup for heat sinking. However, Komoto discloses, as discussed above, that a metal reflector extends beyond the cup it is inserted in. Although, Komoto does not mention heat-sinking function associated with the metal reflector, he discloses the claimed structure. It is well settled that recitation of a new intended use for an old product does not make a claim to that old product patentable. See *In re Spada*, 911 F.2d 705, 708, 15 USPQ2d 1655, 1657 (Fed. Cir. 1990). In this case, since the structural limitation is in the prior art, a new intended use, namely heat sinking, associated with a structural element is not patentable.

Conclusion

6. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dana Farahani whose telephone number is (703)305-1914. The examiner can normally be reached on M-F 9:00AM - 6:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wael Fahmy can be reached on (703)308-4918. The fax phone numbers for the organization where this application or proceeding is assigned are (703)872-9318 for regular communications and (703)872-9319 for After Final communications.

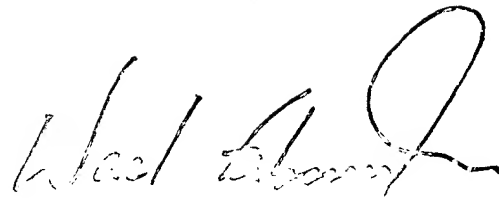
Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703)308-0956.

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Dana Farahani
January 10, 2003

A handwritten signature in black ink, appearing to read "Wael Abou". The signature is fluid and cursive, with a large loop at the end.

SUPERVISORY ENGINEER
TECHNOLOGY CENTER 2800